

Dual-Arm Autosampler for Drug Discovery

The Challenge

To develop an autosampler that provides drug discovery scientists with the fastest high quality delivery available for traditional sample acquisition methods (LC-MS).

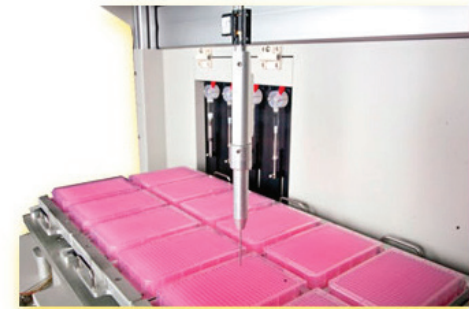
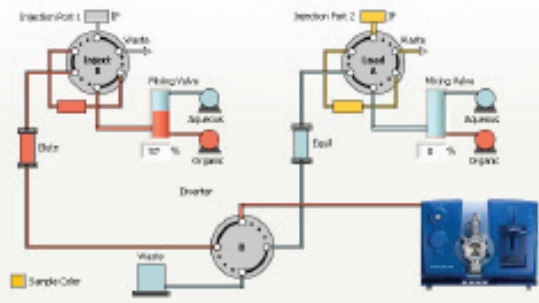
The Solution

PVI Systems partnered with Pfizer and Apricot Designs to develop the ADDA High Speed Dual Arm Autosampling System for use in high throughput labs. With the ADDA system, large volumes of samples can be analyzed with extraordinary turnaround time and reliability.

Features

- Control of dual-robotic arms using Tecan stepper motors
- Real-time control of pumps and valves via NI cRIO controllers
- Intuitive visual user interfaces simplifying workflow
- Fast, high quality delivery at 8 seconds per sample, with 8 unique injection ports
- Database logging to SQL Server accessible via an enterprise network
- High throughput data analysis
- Integration with Mass Spectrometer software

Developed by PVI engineers, the ADDA software synchronizes movement of the robotic arms with the positions of the multiple valves and syringe pumps. The software also provides seamless workflow for the user to acquire samples, process data, and share results across an enterprise network. The software allows the operator to efficiently screen unprecedented numbers of compounds by allowing for automated runs of many different batches without pause.



Deployment

The ADDA system represents a significant leap forward in both cost savings and speed within high throughput drug discovery, allowing the user to maximize the efficiency of a mass spectrometer and improving the process of drug discovery.



For more information, contact us at info@pvisys.com.